

[0154] If not otherwise stated or otherwise made clear from the context, the statement that two entities are different means that they are differently addressed in the mobile network. It does not necessarily mean that they are based on different hardware. That is, each of the entities described in the present description may be based on a different hardware, or some or all of the entities may be based on the same hardware.

[0155] According to the above description, it should thus be apparent that exemplary embodiments of the present invention provide, for example a relay node such as a mobile relay node, or a component thereof, an apparatus embodying the same, a method for controlling and/or operating the same, and computer program(s) controlling and/or operating the same as well as mediums carrying such computer program(s) and forming computer program product(s). Furthermore, according to the above description, it should thus be apparent that exemplary embodiments of the present invention provide, for example a management entity such as a mobility management entity, or a component thereof, an apparatus embodying the same, a method for controlling and/or operating the same, and computer program(s) controlling and/or operating the same as well as mediums carrying such computer program(s) and forming computer program product(s). Furthermore, according to the above description, it should thus be apparent that exemplary embodiments of the present invention provide, for example a operation center such as an operation and maintenance center, or a component thereof, an apparatus embodying the same, a method for controlling and/or operating the same, and computer program(s) controlling and/or operating the same as well as mediums carrying such computer program(s) and forming computer program product(s).

[0156] Implementations of any of the above described blocks, apparatuses, systems, techniques or methods include, as non limiting examples, implementations as hardware, software, firmware, special purpose circuits or logic, general purpose hardware or controller or other computing devices, or some combination thereof.

[0157] It is to be understood that what is described above is what is presently considered the preferred embodiments of the present invention. However, it should be noted that the description of the preferred embodiments is given by way of example only and that various modifications may be made without departing from the scope of the invention as defined by the appended claims.

1. An apparatus, comprising:

requesting means for requesting a group identifier of a cooperative group of network nodes providing a gateway function for the apparatus from a network control server, wherein the request comprises a selection criterion;

indicating means for indicating the group identifier of the selected cooperative group to an access network node or a mobility management entity of the apparatus.

2. The apparatus according to claim 1, wherein the selection criterion comprises at least one of a direction into which the apparatus intends to move, a destination to which the apparatus intends to move, a current area where the apparatus is currently located, and a type of transport means on which the apparatus is installed.

3. The apparatus according to claim 1, further comprising: interfacing means for interfacing with the access network node via plural interfaces, wherein each of the interfaces is related to a different one of the network nodes of the selected cooperative group;

selecting means for selecting one of the plural interfaces for each user equipment connected to the apparatus; routing means for routing a traffic of the user equipment via the selected interface to the access network node.

4. The apparatus according to claim 3, wherein the selecting means is for selecting the one of the plural interfaces based on a distance to the respective network node of the cooperative group at a time when the user equipment initiates a service request for the traffic.

5. The apparatus according to claim 1, further comprising: relay interfacing means for interfacing with the access network node via a relay radio interface;

UE interfacing means for interfacing with a user equipment via a UE radio interface;

relaying means for relaying a traffic of the user equipment between the relay interfacing means and the UE interfacing means.

6. Relay node comprising an apparatus according to claim

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7. An apparatus, comprising:

storing means for storing a group identifier of a cooperative group of one or more network nodes and related one or more node identifiers, wherein each node identifier is related to a network node in the cooperative group;

selecting means for selecting at least one of the network nodes in the cooperative group to provide a gateway function for the relay;

providing means for providing the respective node identifiers of the at least one selected network node to an access network node for which the providing means is aware that the relay node is connected to the access network node via a radio interface, and to provide an identification of the access network node to each of the at least one selected network node.

8. The apparatus according to claim 7, wherein the storing means is also for storing plural group identifiers each with related one or more node identifiers, wherein the apparatus comprises

uniqueness caring means for caring that each of the plural group identifiers is unique for the apparatus.

9. The apparatus according to claim 7, further comprising:

supervising means for supervising at least one of a backhaul capacity and a load condition of at least one network node of the cooperative group, wherein

the selecting means is additionally for selecting and for deselecting one or more of the network nodes in the cooperative group dependent on a result of the supervising by the supervising means.

10. The apparatus according to claim 7, wherein the selection means is also for selecting the at least one of the network nodes based on a receipt time of the request.

11. A mobility management entity comprising an apparatus according to claim 7.

12. An apparatus, comprising:

storing means for storing a group identifier of a cooperative group of network nodes and a related selection criterion;

providing means for providing, to the relay node, the group identifier.

13. The apparatus according to claim 12, wherein the selection criterion comprises at least one of a direction into which the relay node intends to move, a destination to which the relay node intends to move, a current area where the relay node is currently located, and a type of transport means on which the relay node is installed.